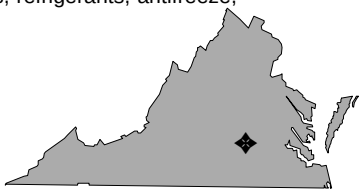
Defense Supply Center Richmond — NPL

Size: 631 acres
Mission: Manage general supplies for the Armed Services
HRS Score: 33.85; placed on NPL in July 1987
IAG Status: IAG signed in 1991
Contaminants: Phenols, solvents, paints and paint residues, corrosives, pesticides, refrigerants, antifreeze, photographic chemicals, and oils
Media Affected: Groundwater and soil
Funding to Date: $27.4 million
Estimated Cost to Completion (Completion Year): $28.2 million (FY2015)
Final Remedy in Place or Response Complete Date for All Sites: FY2001



Richmond, Virginia

Restoration Background

Preliminary Assessments and Site Inspections identified 31 sites at this installation. During negotiation of an FY91 Interagency Agreement, sites were grouped into eight operable units (OUs) and six Expanded Site Inspections (ESIs). In FY92, a ninth OU was listed as an Interim Action site. Seven of the sites were determined to pose no hazard to the environment; four sites are not covered by CERCLA.

In FY89, an underground storage tank (UST) program was implemented. Through FY95, 30 tanks were replaced with double-wall plastic tanks, and the need for 20 tanks was eliminated.

Two Records of Decision (RODs) were signed in FY92, designating institutional controls (ICs) for contaminated soil at OU1 and a vapor vacuum extraction system as the Remedial Action (RA) for contaminated soil at OU5. Operations at a pilot plant indicated that contamination in the OU5 soil had decreased to undetectable levels, prompting modification of the ROD and OU5 closeout. In FY93, a third ROD was signed, requiring installation of an extraction and treatment system to remove volatile organic compounds (VOC's) from the groundwater at OU9. The system was implemented in September 1996. In FY95, a fourth ROD was signed requiring a two-phase RA for soil at the National Guard Area. ICs and excavation and disposal of 150 cubic yards of contaminated soil were implemented.

Also in FY95, six ESIs were completed. Three areas proceeded to the Remedial Investigation and Feasibility Study (RI/FS) phase and were designated OUs 10, 11, and 12. One other area was combined with OU4; the remaining two require no further action. During the RI/FS for OU7, another site was identified, which was called OU13. Exploratory trenching of soil at OU2 was conducted to characterize materials disposed of in an abandoned landfill.

During FY96, the installation completed investigations at one UST site, closed out the investigation of an indoor pistol range, and implemented an air stripping system. The RIs for the fire training area (OU4 and OU7), the acid neutralization pits (OU8), and the fire training pit (OU7) were completed. Fieldwork concluded for a pilot study for OU7 and OU8 to determine the feasibility of a dual-phase vacuum vapor extraction technology and for background risk assessment. A computer model of the contamination plume for the PX gas station was completed, and the corrective action plan was modified.

During FY97, the installation implemented a recovery system for the gasoline phase on groundwater at the PX gas station. It also completed remediation of soil at OU3 and the final FS for OU4. A work plan for removal of contaminated soil from OU2 and a draft Proposed Plan for OU4 were completed. The installation initiated a Treatability Study for groundwater at OU8.

FY98 Restoration Progress

A five-year review of OU1 and the FS and drafts of the Action Memorandum, the Proposed Plan, and the ROD for OU2 were completed. Storm sewers in OU2 were videotaped as a means of determining their condition. A work plan was developed for delineating and removing hydrocarbon in OU2. A revised risk assessment of OU4, after a change in criteria resulted in savings of more than $1.3 million in design and cleanup costs. The point of compliance for OU6 was determined.

A design for a pilot test for density-driven convection was completed for OU7. A pilot test for OU8 also was completed, and with minor modifications, the pilot system is sufficient for cleaning up the groundwater in approximately 5 years. A draft Proposed Plan and a ROD supporting dual-phase extraction for OU8 were prepared. Draft Proposed Plans and RODs for OUs 10 and 11 were completed. Draft final RIs for OUs 12 and 13 and a draft FS for OU12 were issued. Also, one UST project was completed.

Plan of Action

- Complete delineation and removal of hydrocarbon-contaminated soil at OU2 in FY99
- Issue explanation of significant differences for OU3 that will permit delisting of the OU in FY99
- Issue final Proposed Plans and RODs for OUs 2, 4, 6, 8, 10, 11, and 12 in FY99
- Complete pilot test of density-driven convection and issue Focused Feasibility Study addendum, draft final Proposed Plan, and ROD for OU7 in FY99
- Complete pilot test of dual-phase vacuum extraction at OU6 in FY99
- Issue final Proposed Plans and RODs for OUs 7 and 13 in FY00
- Delist OU1, OU3, and OU5 in FY00
- Start Remedial Designs for OUs 2, 6, 7, 12, and 13 in FY00

FY99 Funding by Phase and Relative Risk